Homework 2

- Finish the Labs from class if not finished
- Read Chapter 2.1 – 2.3
- Watch youtube video: https://www.youtube.com/watch?v=rjkYAs6gAkk
- Self -Check problems: 2, 4, 6, 8, 12

2. Trace the evaluation of the following expressions, and give their resulting values:

Show your work.

a. 2 + 3 * 4 – 6
b. 14 / 7 * 2 + 30 / 5 + 1
c. (12 + 3) / 4 * 2
d. (238 % 10 + 3) % 7
e. (18 – 7) * (43 % 10)
f. 2 + 19 % 5 – (11 * (5 / 2))
g. 813 % 100 / 3 + 2.4
h. 26 % 10 % 4 * 3
i. 22 + 4 * 2
j. 23 % 8 % 3
k. 12 – 2 – 3
l. 6/2 + 7/3
m.6 * 7 % 4
n. 3 * 4 + 2 * 3
o. 177 % 100 % 10 / 2
p. 89 % (5 + 5) % 5
q. 392 / 10 % 10 / 2
r. 8 * 2 – 7 / 4
s. 37 % 20 % 3 * 4
t. 17 % 10 / 4

4. Trace the evaluation of the following expressions, and give their resulting values:

Show your work.

a. 2 + 2 + 3 + 4
b. "2 + 2" + 3 + 4
c. 2 + " 2 + 3 " + 4
d. 3 + 4 + " 2 + 2"
e. "2 + 2 " + (3 + 4)
f. "(2 + 2) " + (3 + 4)
g. "hello 34 " + 2 * 4
h. 2 + "(int) 2.0" + 2 * 2 + 2
i. 4 + 1 + 9 + "." + (-3 + 10) + 11 / 3
j. 8 + 6 * –2 + 4 + "0" + (2 + 5)

k. 1 + 1 + "8 – 2" + (8 – 2) + 1 + 1
l. 5 + 2 + "(1 + 1)" + 4 + 2 * 3
m."1" + 2 + 3 + "4" + 5 * 6 + "7" + (8 + 9)

6. Imagine you are writing a program that stores a student's year (Freshman, Sophomore, Junior, or Senior), the number of courses the student is taking, and his or her GPA on a 4.0 scale. Declare variables with the appropriate names and types to hold this information.

8. Suppose you have an int variable called number. What Java expression produces the second-to-last digit of the number (the 10s place)? What expression produces the third-to-last digit of the number (the 100s place)?

12. What is the output from the following code?

```
int max;
int min = 10;
max = 17 – 4 / 10;
max = max + 6;
min = max – min;
System.out.println(max * 2);
System.out.println(max + min);
System.out.println(max);
System.out.println(min);
```